EMOTION

By

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Emotion

- A state of feeling that has cognitive, physiological and behavioral changes

OR

- A state of arousal involving facial and body changes, brain activation, cognitive assessments, subjective feelings and tendencies towards actions, all shaped by cultural rules.

Emotion

Internal conscious states that we infer in ourselves and others.

- Emotions are private experiences.
- We use operational definitions because we cannot actually see feelings.
- We infer observable behavior associated with emotion.

Emotion

- A definition would most likely include the idea that emotions are expressed by language, facial expressions and gestures.

Emotion in simple words

- An **emotion** is a feeling such as happiness, love, fear, anger, or hatred, which can be caused by the situation that you are in or the people you are with. ... **Emotion** is the part of a person's character that consists of their feelings, as opposed to their thoughts.

Definition

- In psychology, **emotion** is often defined as a complex state of feeling that results in physical and psychological changes that influence thought and behavior. ... Meyers, human **emotion** involves "... physiological arousal, expressive behaviors, and conscious experience."

The Relationship Between Motivation and Emotion

- The nature of the relationship between motivation and emotion, as well as the definition of emotion itself is an unresolved issue in psychology. Most people would say that anger, fear, joy and grief are emotions but would classify hunger, thirst and fatigue as the states of the organism that serve as motives. There is no clear-cut distinction.

The Relationship Between Motivation and Emotion

- The most common basis for differentiating between the two assumes that emotions are usually aroused by external stimuli and that emotional expression is directed toward the stimuli in the environment that arouses it.
- Motives on the other hand are more often aroused by internal stimuli and are naturally directed toward certain objects in the environment (e.g., food, water, a mate).

The Relationship Between Motivation and Emotion

- Most motivated behavior has some affective or emotional supplement although we may be too pre-occupied in our striving toward the goal to focus on our feelings at that time. When we talk about motivation, we usually focus on the goal directed activity; in discussing emotion our attention is drawn in the subjective, affective experiences that accompany behavior.

Feelings

- Many of our emotional terms can be classified by intensity. Some physiologists reserve the term emotion for the more intense states that are accompanied by widespread changes in body physiology and call the wilder affective states “feelings.”

Types of Emotion

Primary emotions :
Emotions considered to be universal and biologically based.

- Fear
- anger
- sadness
- happiness
- Surprise
- Hatred
- Guilt
- Shame

Types of Emotion

- Secondary emotion

  Emotions that develop with cognitive maturity and differ across individuals and cultures

Emotion

Elements of Emotion

1-Physiological changes in the face, brain, and body
2-Cognitive processes such as interpretations of events
3-Cultural influences that shape the experience and expression of emotion

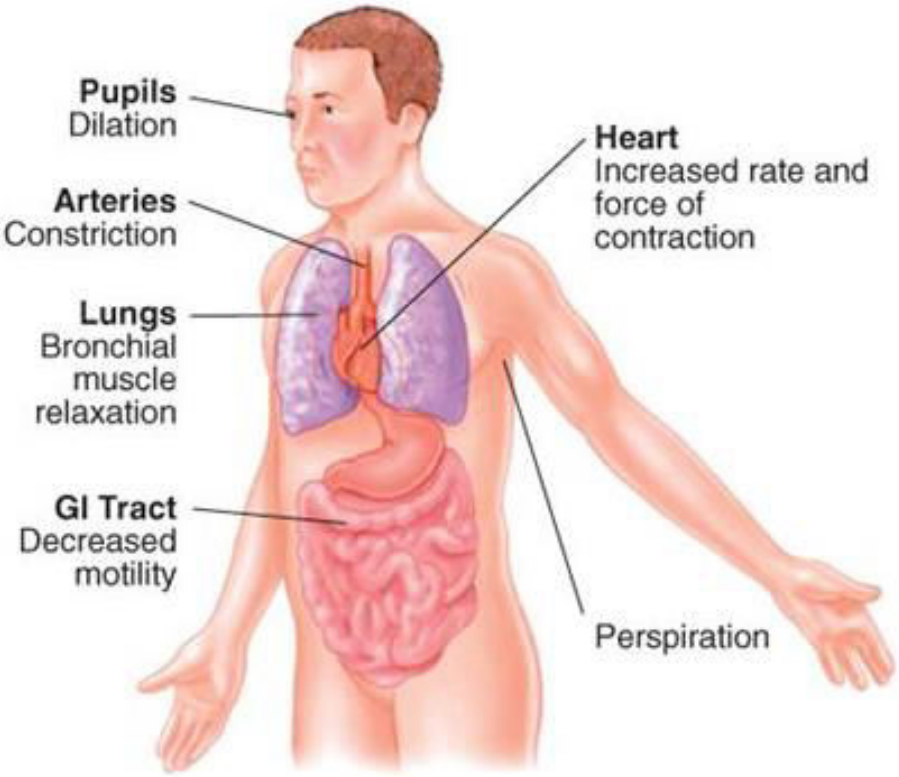
Physiological changes in emotions

- Three biological areas of emotion are
  - Facial expressions,
  - Brain regions and circuits, and
  - Autonomic nervous system

PHYSIOLOGICAL CHANGES IN EMOTION

- Direct observation by means of various recording instruments has given scientists a great deal of information about the bodily changes in emotion.
- Psycho-physiologists who study such bodily changes, are able to measure the heart rate, the blood pressure, the blood flow in various parts of the body, activity of the stomach and gastro intestinal system, levels of various substances in the blood, breathing rate and dept, and many other changes in emotion.
- Most of the physiological change that occur during intense emotion result from activation of the sympathetic division of the autonomic nervous system as it prepares the body for emergency action.

The Role of Physiology in Emotion



Stress can activate the hypothalamus which can cause increased heart rate, perspiration, and dilation of pupils.

PHYSIOLOGICAL CHANGES IN EMOTION

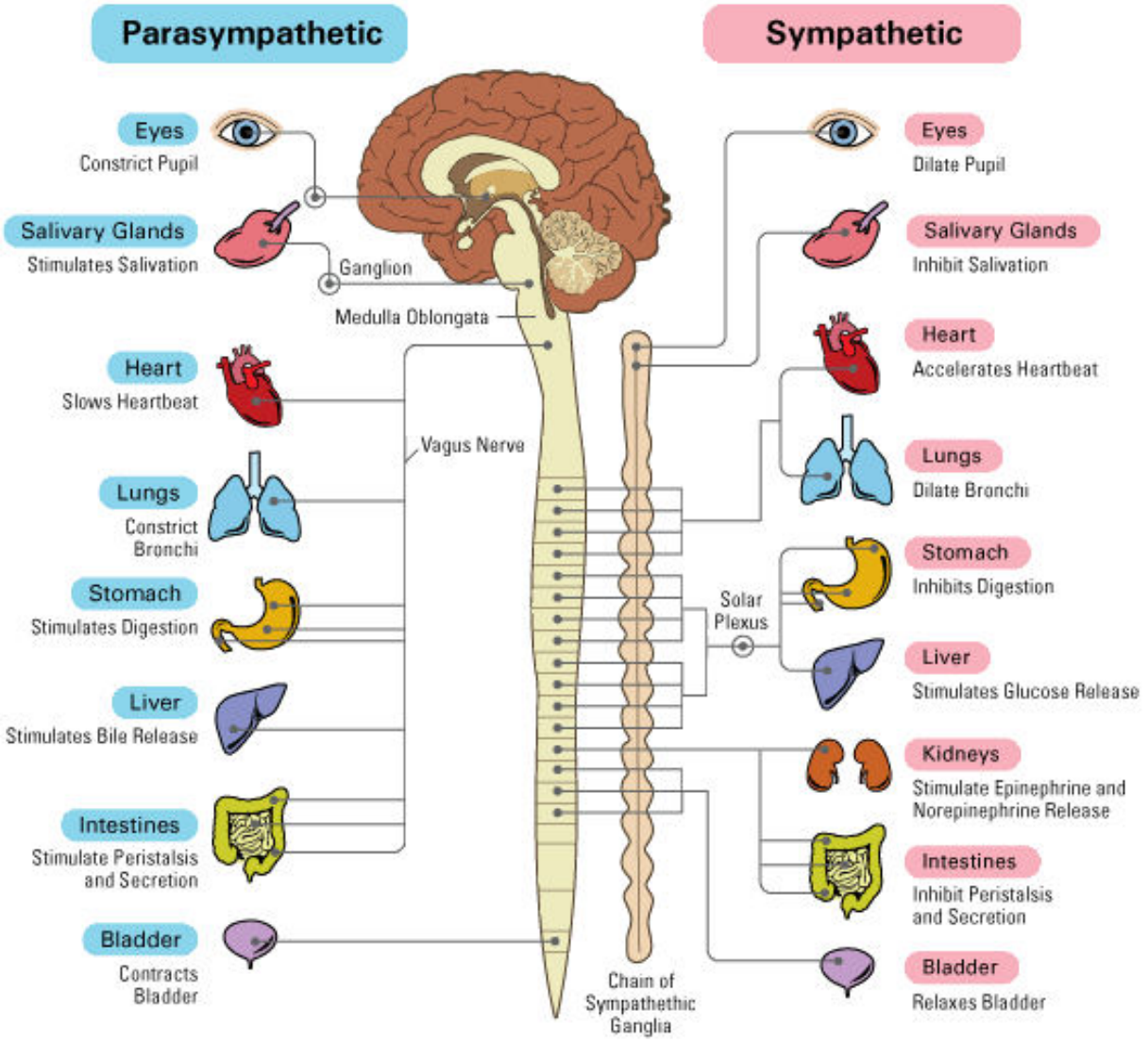
The sympathetic system is responsible for the following changes.

- Blood pressure and heart rate increases.
- Respiration becomes more rapid.
- The pupils of the eyes dilate.
- Electrical resistance of the skin decreases.
- Blood sugar level increases to provide more energy.
- The blood is able to clot more quickly in the case of wounds.
- Motility of the gastrointestinal tract decreases or stops entirely, blood is diverted from the stomach and intestines and sent to the brain and skeletal muscles.
- The hairs on the skin erect causing “goose pimple.”

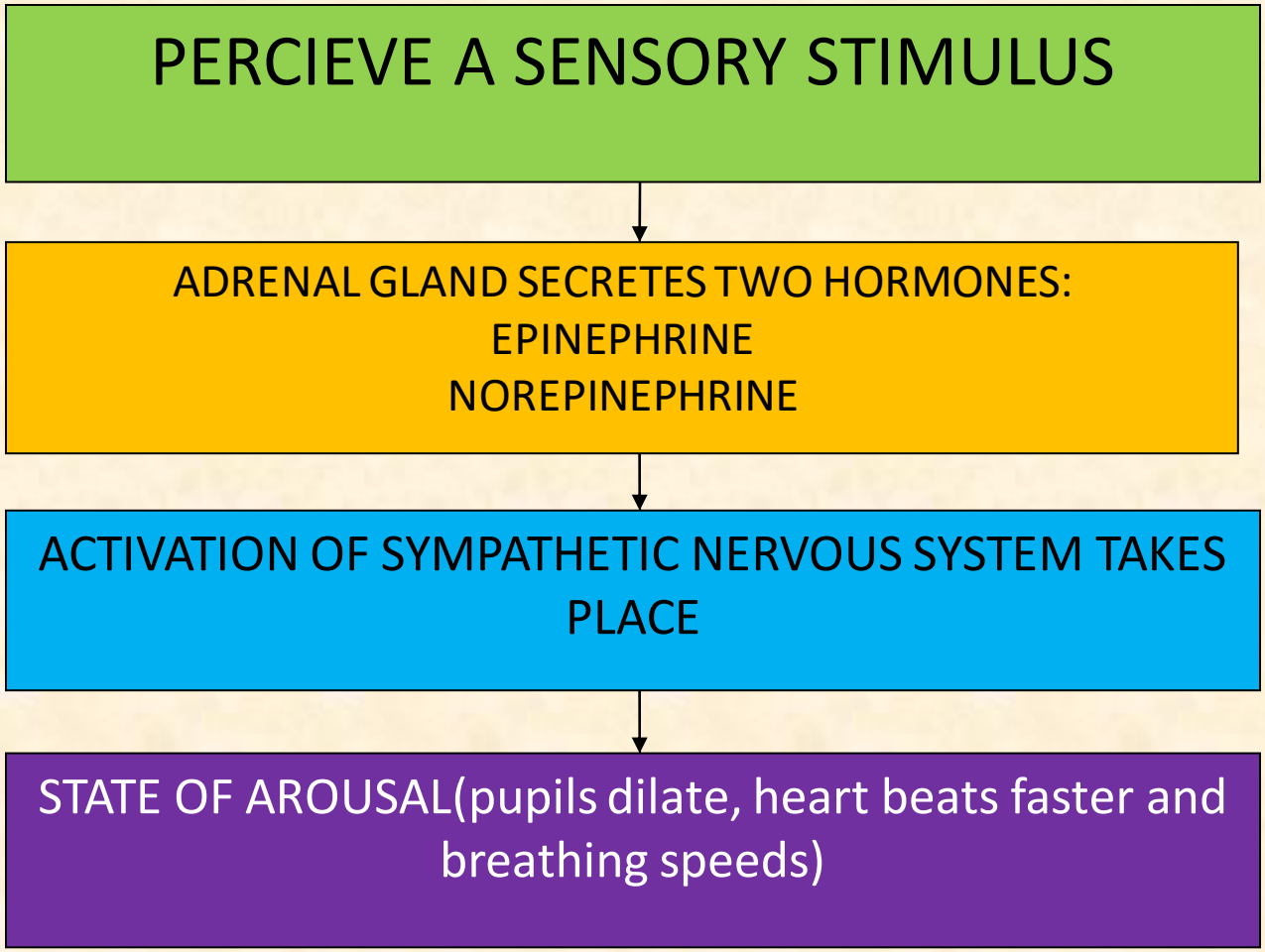
Sympathetic and Parasympathetic Reactions

- Every situation calls for its own special mixture of arousal by the sympathetic (fight or flight) and parasympathetic (conservation of energy) N.S.
- Flight or Flight: Sympathetic response prepares body to meet a crisis.
- **Rest or Digest**: Parasympathetic calms body to aid in digestion.

Schema Explaining How Parasympathetic and Sympathetic Nervous Systems Regulate Functioning Organs



PHYSIOLOGICAL CHANGES IN EMOTION


PERCIEVE A SENSORY STIMULUS
ADRENAL GLAND SECRETES TWO HORMONES:
EPINEPHRINE
NOREPINEPHRINE
ACTIVATION OF SYMPATHETIC NERVOUS SYSTEM TAKES PLACE
STATE OF AROUSAL(pupils dilate, heart beats faster and breathing speeds)

PHYSIOLOGICAL CHANGES IN EMOTION

- In emotion, the sympathetic system also causes the discharge of the hormones epinephrine (adrenaline) and nor epinephrine (nor adrenaline). Nerve impulses in the sympathetic system which reach adrenal glands located on the top of the kidneys trigger the secretion of these hormones. They then go into the blood and circulate around the body.

PHYSIOLOGICAL CHANGES IN EMOTION

- The other part of the autonomic nervous system called the other part of the autonomic nervous system called the parasympathetic system tends to be active when we are calm and relaxed. It does many things that help to builds up and conceive the body's stores of energy. For example, it decreases the heart rate, reduces the blood pressure, and diverts blood to the digestive system. This is an oversimplified description of the sympathetic and parasympathetic systems. Both are often active simultaneously.

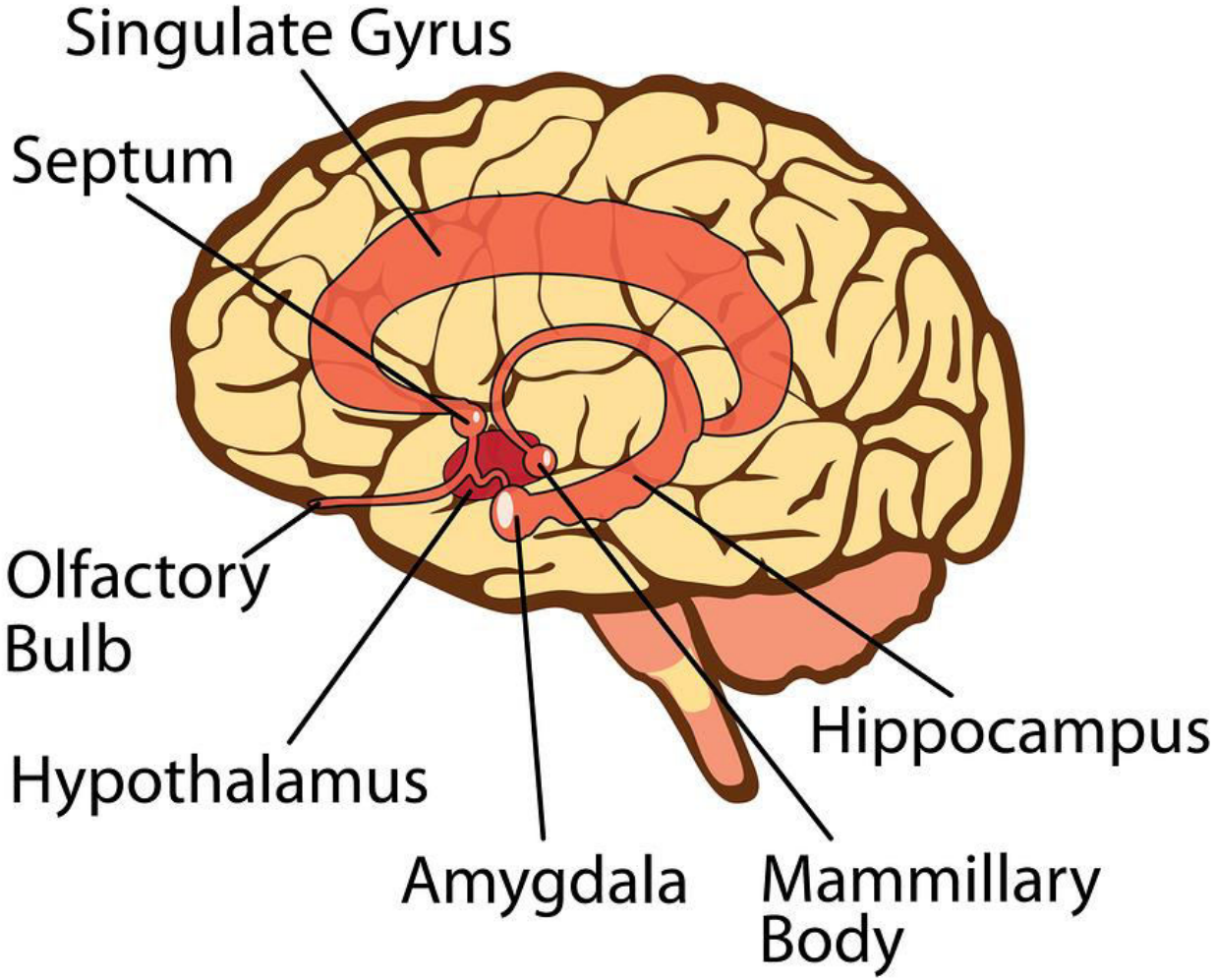
PHYSIOLOGICAL CHANGES IN EMOTION

- In certain emotional states both the sympathetic and parasympathetic system acts together. These physiological changes accompanying intense emotions are the basis for the use o polygraph commonly known as the “lie detector” in checking the reliability of an individual’s statements. The term lie detector is actually incorrect. The poly-graph does not detect lies. It simply measures some of physiological accompaniments of emotion. The measures moist frequently recorded are alternations in heart rate, blood pressure, respiration and the galvanic skin response or GSR (the GSR is a change in the electrical conductivity of the skin).

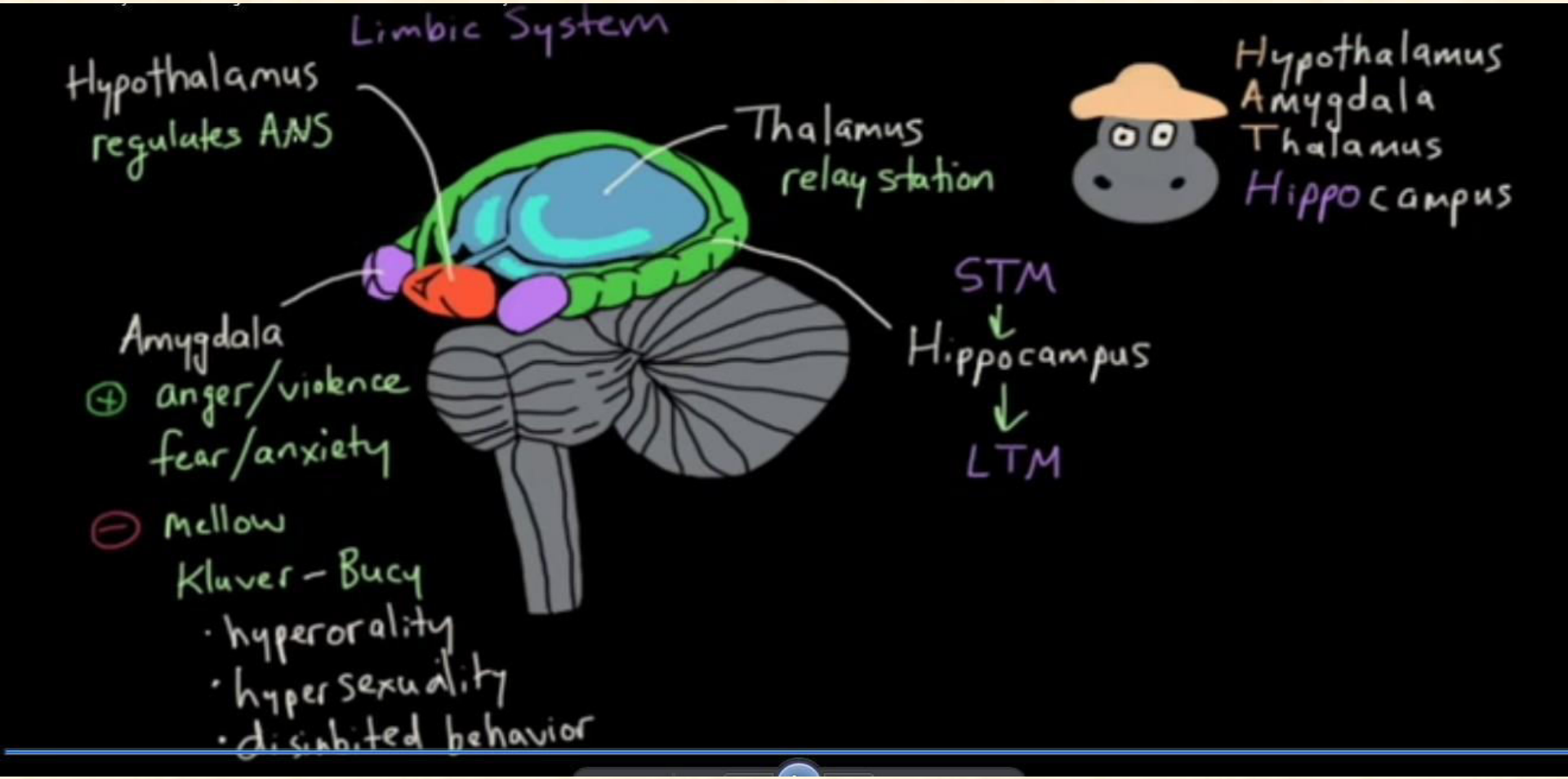
Facial Expressions

- Facial expressions for primary emotions are universal.
- A smile sends a message to the brain and positive emotions increase.
- Even members of remote cultures can recognize facial expressions in people who are foreign to them.
- Infants are able to read parental expressions.
- Facial expression can generate same expressions in others, creating mood contagion.

LIMBIC SYSTEM STRUCTURES



Limbic System



THE BRAIN AND EMOTION

- The bodily changes in emotion are brought about by the autonomic nervous system the part of the peripheral nervous system that excites the smooth muscles, the heart muscle, and certain glands.
- The other part of peripheral nervous system-the somatic system-activates the striped muscles of the body and carries sensory information inward to the central nervous system-the brain and spinal cord.
- The somatic nervous system is also a channel for the expression of emotion. For instance, the changes in breathing and bodily postures of emotion are controlled by the somatic nervous system.

THE BRAIN AND EMOTION

- The central nervous system controls the patterns of activity in the autonomic and somatic nervous systems during emotional expression.
- The brain is also involved in the perception of situation which will give rise to emotion. A number of structures in the core of the brain are involved in the expression of stronger emotions such as fear and rage.
- These parts of the brain form a complex system called the limbic system.

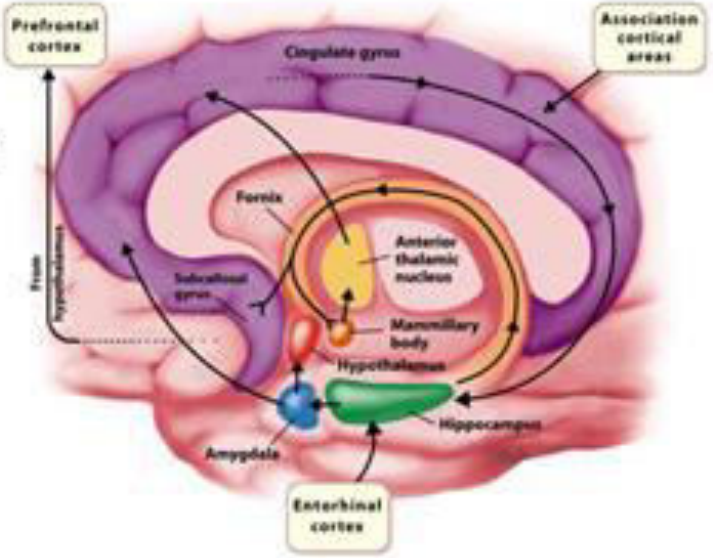
THE BRAIN AND EMOTION

- Experimenters have discovered that damage to some of the structures in the limbic system causes great changes in the emotional behavior of animals.
- Electrical stimulation of portions of the limbic system through small wires, called electrodes, that have been permanently implanted, can produce emotional behavior in animals.

Hypothalamic Theory of Emotion

Cannon (1915, 1927, 1929); Bard (1928)

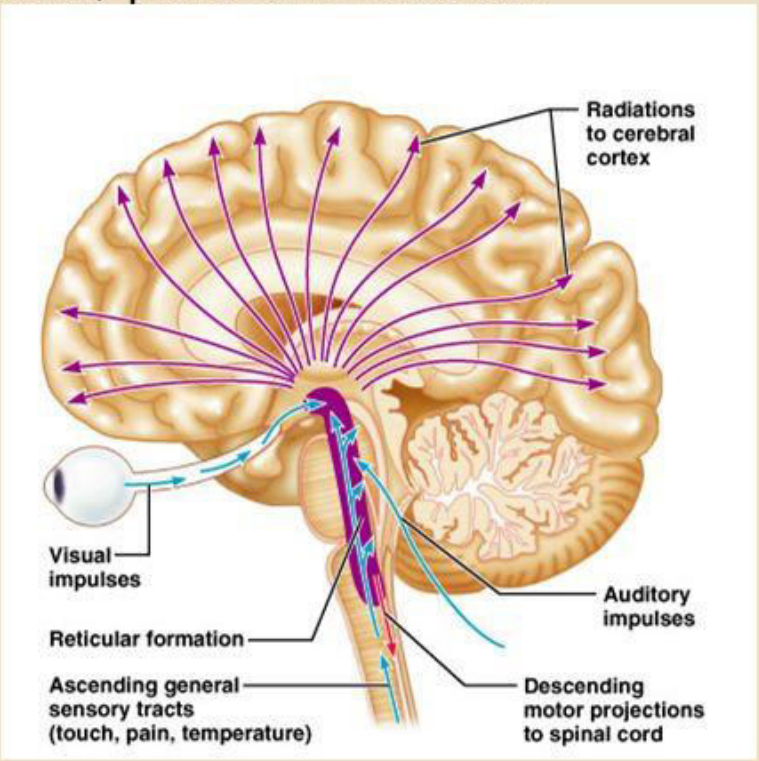
- Emotional State
  - Generated by Hypothalamus
- Emotional Behavior
  - Discharges to Brainstem
- Emotional Experience
  - Discharges to Cortex



Reticular formation

Runs through central core of medulla, pons and midbrain

- Reticular activating system (RAS): keeps the cerebral cortex alert and conscious
- Some motor control



CHANNELS OF EMOTION

a) EYE CONTACT
b) BODY MOVEMENT
c) TONE OF VOICE
d) AN EYE BROW POSITION
e) FRUSTRATION
f) CONFLICT

Biological Response to Emotion

- Scream, Run away…infers fear.
- Gut reaction:
- Heart races, energy boost.
- What coordinates body response?

PSYCHO-SOMATIC REACTIONS

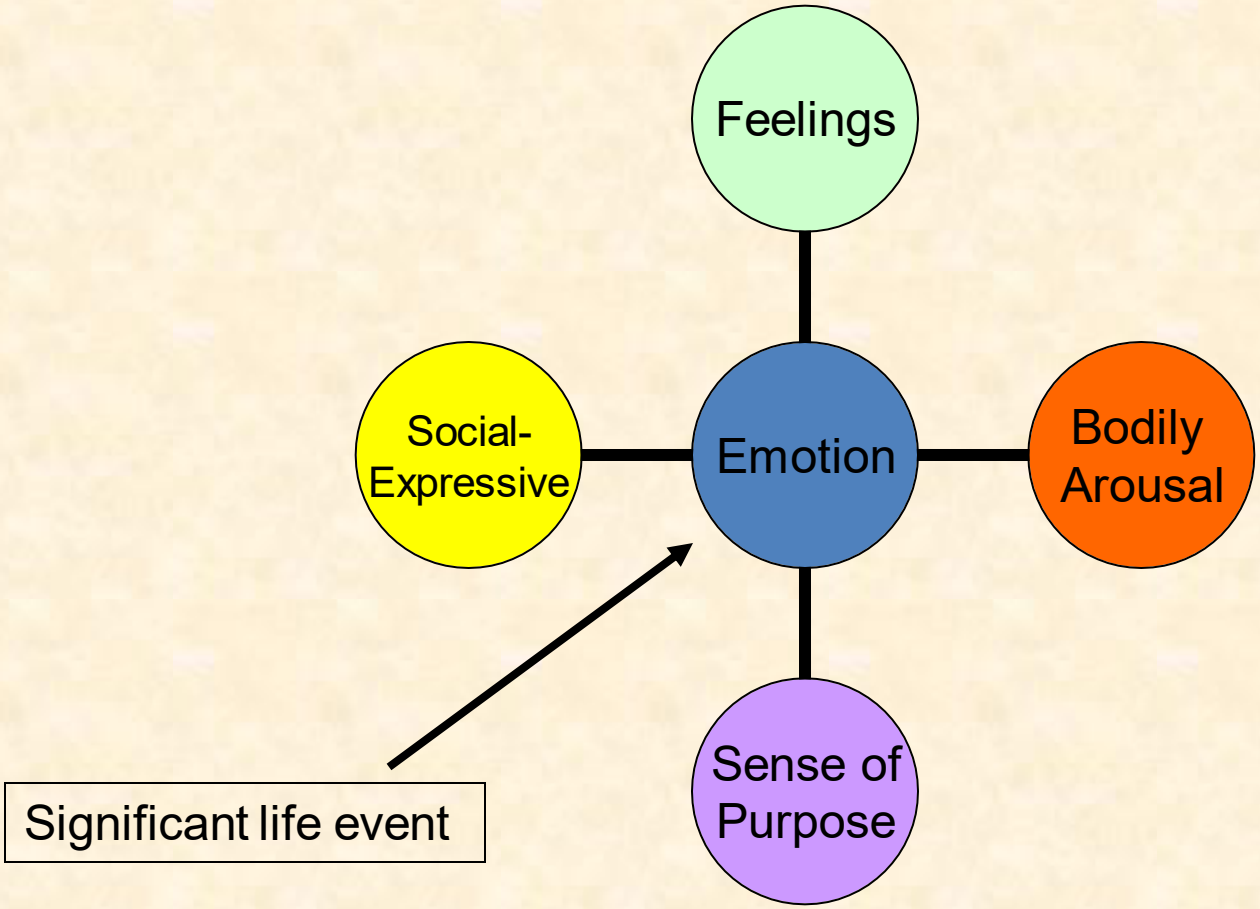
- The bodily changes that place in fear and anger mobilize the body's energy to deal with emergency situations. These strong emotions have been characterized as emergency reactions of the body.
- Although there are some differences between fear and anger in the body's emergency reactions, the overall effect is that the changes make it possible for a person to react more quickly, exert more strength, run faster or fight harder. Thus the emergency reactions the so called" flight or fight" response have an adaptive value.

PSYCHO-SOMATIC REACTIONS

- These disorders are called psychosomatic- ‘psycho’ meaning mind and ‘soma’ meaning body-because they are induced by psychological stresses.
- It has been demonstrated that many disorders have a psychosomatic basis in some people peptic ulcers, high blood pressure, asthma, dermatitis, obesity and other.
- Ulcers have been produced experimentally in rat dogs, and monkeys that are subjected to regimen in which they suffer chronic fear.

Emotions are Multidimensional

Four components of Emotion



Feeling component

- Emotions are subjective feelings
- Make us feel in a particular way.
- Anger or joy.
- Meaning and personal significance.
- Vary in intensity and quality.
- Rooted in mental processes (labeling).

Bodily Arousal

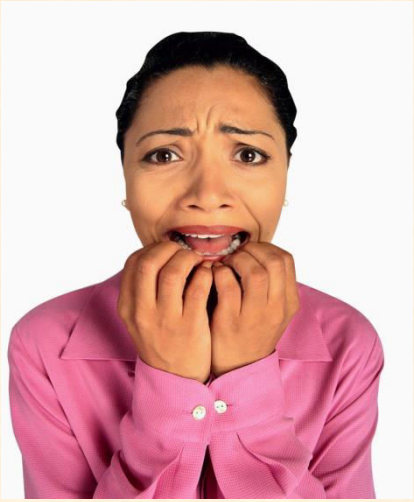
- Biological activation.
- Autonomic and hormonal systems.
- Prepare and activate adaptive coping behavior during emotion.
- Body prepared for action.
- Alert posture, clenched fists.

Purposive component

- Give emotion its goal-directed force.
- Motivation to take action.
- Cope with emotion-causing circumstances.
- Why people benefit from emotions.
- Social and evolutionary advantage.

Social-Expressive component

- Emotion's communicative aspect.
- Postures, gestures, vocalizations, facial expressions make our emotions public.
- Verbal and nonverbal communication.
- Helps us interpret the situation.
- How person reacts to event.



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